

2010

California Recreational Boating Accident Statistics

State of California
The Resources Agency

California Department of
Boating and Waterways

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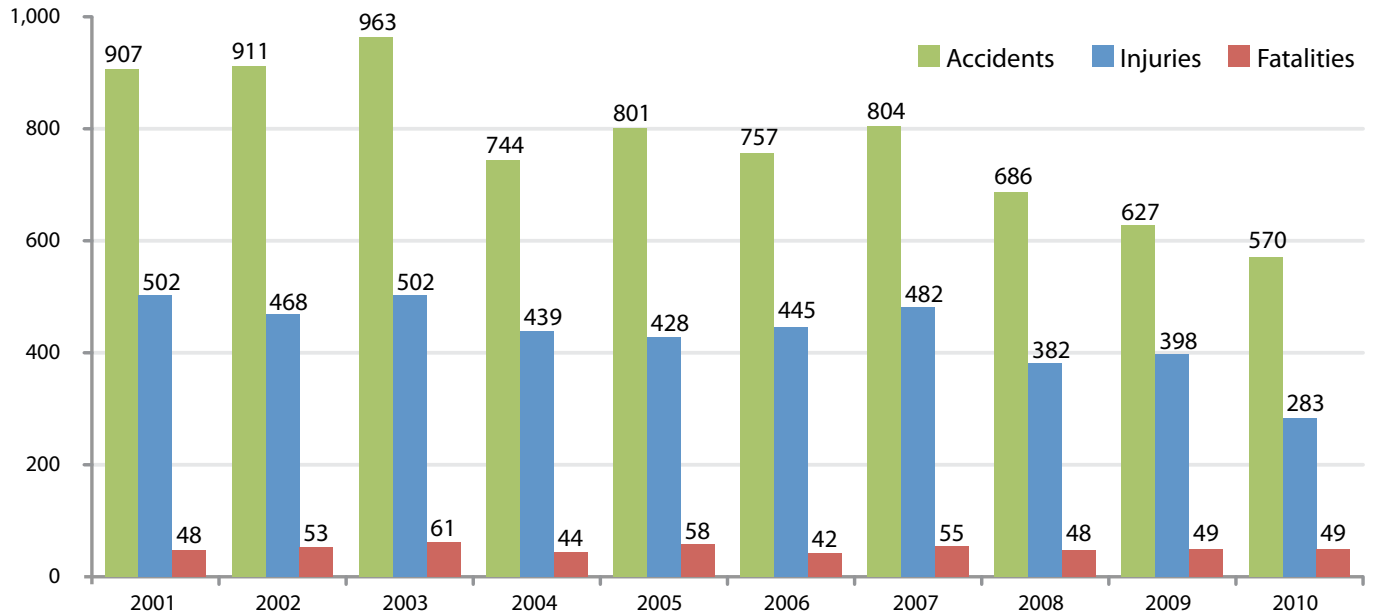




California

Boating Accident Statistics

Accidents, Injuries, and Fatalities 2001–2010



California Boating Accidents by Location 2009-2010

Body of Water	Accidents		Injuries		Fatalities	
	2009	2010	2009	2010	2009	2010
Northern Lake	185	141	143	86	7	5
Southern Lake	69	52	41	34	6	8
Northern Coast	12	18	12	14	7	8
Southern Coast	203	189	96	35	11	8
Northern River	27	30	11	13	2	5
Southern River	4	9	2	4	2	4
SF Bay Area	16	25	3	5	1	6
Delta	81	75	60	64	10	2
Colorado River	30	31	30	28	3	3
Totals	627	570	398	283	49	49

Property Damage 2001-2010

Year	Property Damage
2001	\$2,841,900.00
2002	\$3,732,850.00
2003	\$3,820,000.00
2004	\$4,073,400.00
2005	\$3,584,700.00
2006	\$8,913,375.00
2007	\$10,643,800.00
2008	\$5,899,184.00
2009	\$4,484,105.00
2010	\$4,040,700.00



Boating Accidents

Vessel Registration

County	Accidents	Injuries	Fatalities	Property Damage	Number of Personal Watercraft (PWC)	Number of Vessels (includes PWC)
Alameda	3	0	0	\$9,000	3,462	22,489
Alpine	0	0	0	\$0	7	119
Amador	4	4	0	\$600	220	3,075
Butte	4	4	0	\$5,450	1,441	15,768
Calaveras	6	5	0	\$22,600	589	5,871
Colusa	2	0	0	\$7,400	135	1,391
Contra Costa	23	17	2	\$664,850	5,520	32,384
Del Norte	2	1	2	\$21,500	54	1,444
El Dorado	6	3	2	\$6,400	1,300	13,974
Fresno	7	4	3	\$9,000	2,766	21,088
Glenn	1	1	0	\$1,000	144	1,811
Humboldt	4	3	0	\$7,550	518	7,301
Imperial	4	3	1	\$24,700	435	1,989
Inyo	0	0	0	\$0	148	1,053
Kern	5	3	3	\$12,900	3,499	15,893
Kings	2	2	0	\$6,000	598	2,760
Lake	10	6	3	\$101,650	1,154	10,306
Lassen	1	1	0	\$3,100	291	3,118
Los Angeles	55	11	4	\$442,300	31,725	101,183
Madera	5	4	1	\$3,200	738	5,888
Marin	10	4	6	\$310,000	486	7,740
Mariposa	8	5	0	\$2,800	157	1,555
Mendocino	1	0	1	\$0	402	4,725
Merced	0	0	0	\$0	824	6,211
Modoc	0	0	0	\$0	47	754
Mono	0	0	0	\$0	133	1,426
Monterey	8	0	1	\$23,050	1,018	7,606
Napa	11	3	0	\$19,000	519	5,594
Nevada	5	5	0	\$16,000	608	9,186
Orange	63	12	1	\$229,850	17,644	58,888
Placer	17	8	1	\$34,250	2,364	19,487
Plumas	4	1	1	\$4,500	228	3,559
Riverside	9	9	1	\$13,950	15,956	46,190
Sacramento	18	14	1	\$45,300	5,582	41,020
San Benito	0	0	0	\$0	273	1,638
San Bernardino	32	26	2	\$66,550	15,391	45,853

Boating Accident Statistics

Boating Accidents

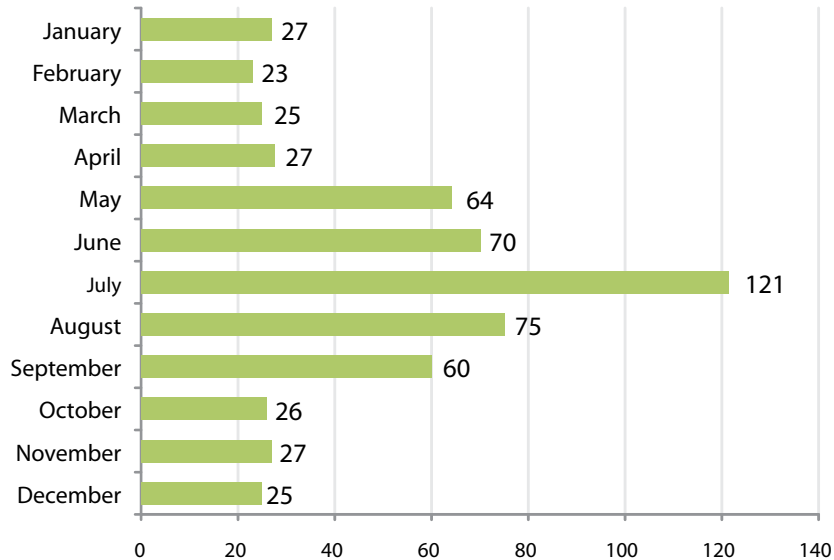
Vessel Registration

County	Accidents	Injuries	Fatalities	Property Damage	Number of Personal Watercraft (PWC)	Number of Vessels (includes PWC)
San Diego	49	13	1	\$257,700	12,236	58,061
San Francisco	9	1	2	\$136,550	340	3,470
San Joaquin	35	29	1	\$858,300	3,302	23,597
San Luis Obispo	11	8	1	\$47,000	1,572	12,270
San Mateo	4	1	1	\$5,550	1,716	10,418
Santa Barbara	25	0	1	\$155,550	1,231	9,265
Santa Clara	4	2	0	\$5,000	4,256	23,686
Santa Cruz	2	3	0	\$4,500	630	6,954
Shasta	34	23	1	\$44,550	1,420	18,787
Sierra	1	1	0	\$0	10	313
Siskiyou	0	0	0	\$0	149	4,056
Solano	13	12	0	\$61,350	1,746	13,819
Sonoma	6	8	1	\$40,500	1,874	16,740
Stanislaus	3	0	0	\$2,200	2,474	17,121
Sutter	1	2	0	\$0	597	5,208
Tehama	5	4	0	\$16,800	394	4,390
Trinity	1	0	0	\$3,000	126	2,085
Tulare	5	2	2	\$17,550	1,399	8,491
Tuolumne	18	8	0	\$178,100	495	5,842
Ventura	5	4	1	\$60,250	4,723	22,133
Yolo	4	0	0	\$27,500	551	5,650
Yuba	5	3	1	\$4,300	462	4,267
Out of State	0	0	0	\$0	766	3,048
Totals	570	283	49	\$4,040,700	158,845	810,008

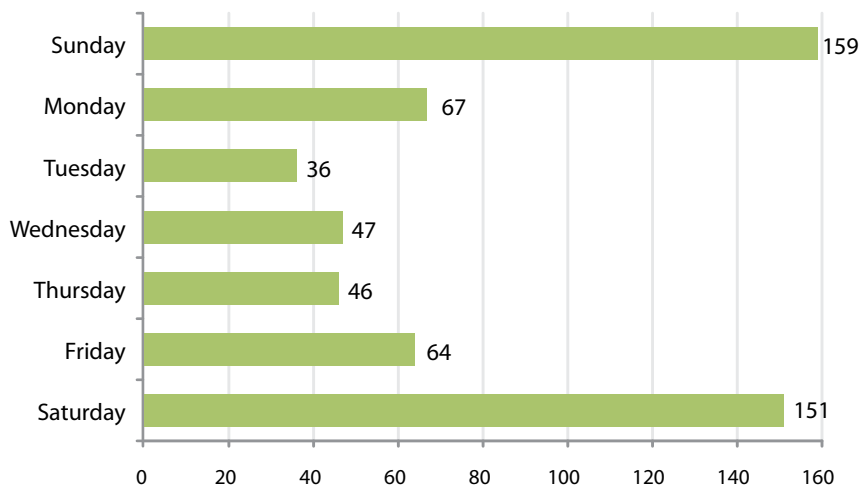


California

Accidents by Month (Total Accidents 570)



Accidents by Day of the Week (Total Accidents 570)

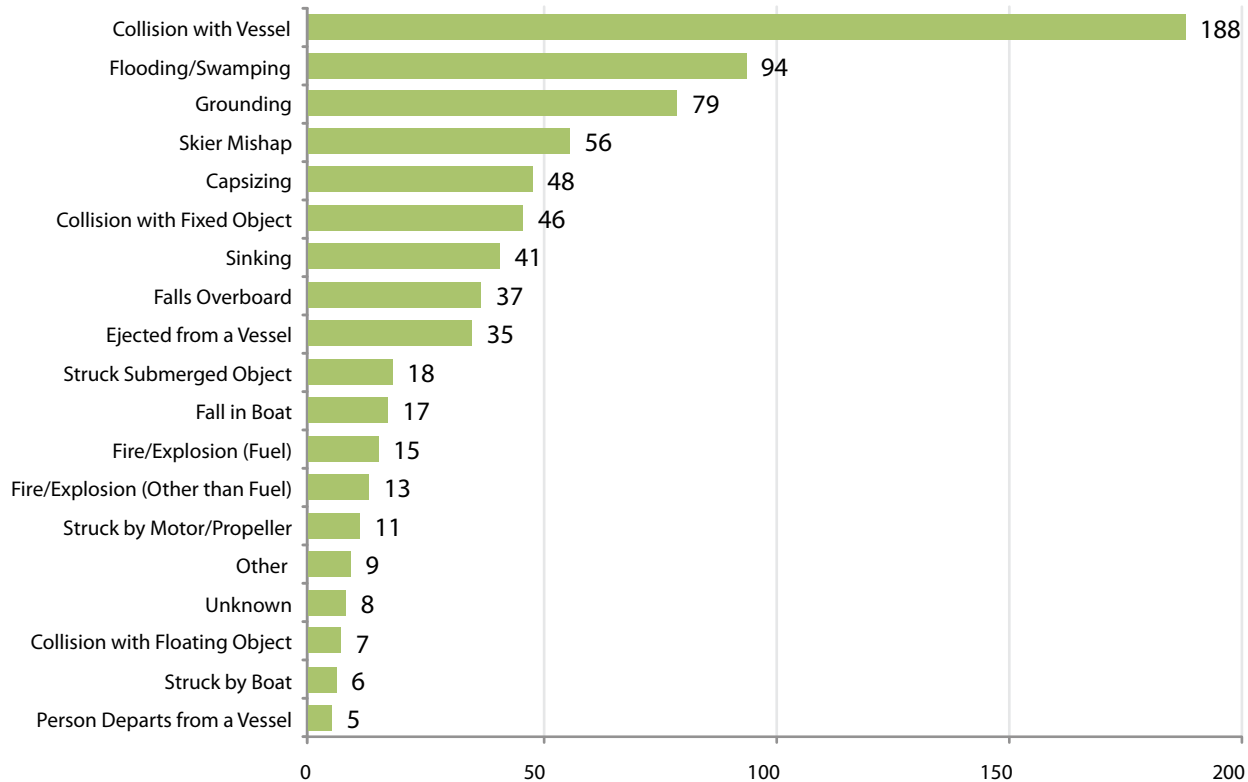


Accidents by Time of Day

Time of Day	Number of Accidents
12:00-1:59 a.m.	7
2:00-3:59 a.m.	10
4:00-5:59 a.m.	9
6:00-7:59 a.m.	14
8:00-9:59 a.m.	32
10:00-11:59 a.m.	59
12:00-1:59 p.m.	95
2:00-3:59 p.m.	117
4:00-5:59 p.m.	120
6:00-7:59 p.m.	58
8:00-9:59 p.m.	27
10:00-11:59 p.m.	13
Time Unknown	9
Total Accidents	570

Boating Accident Statistics

Type of Accidents (Total Types=733* Total Accidents 570)



*Some accidents are represented by more than one accident type, which accounts for the accident types exceeding the number of accidents.

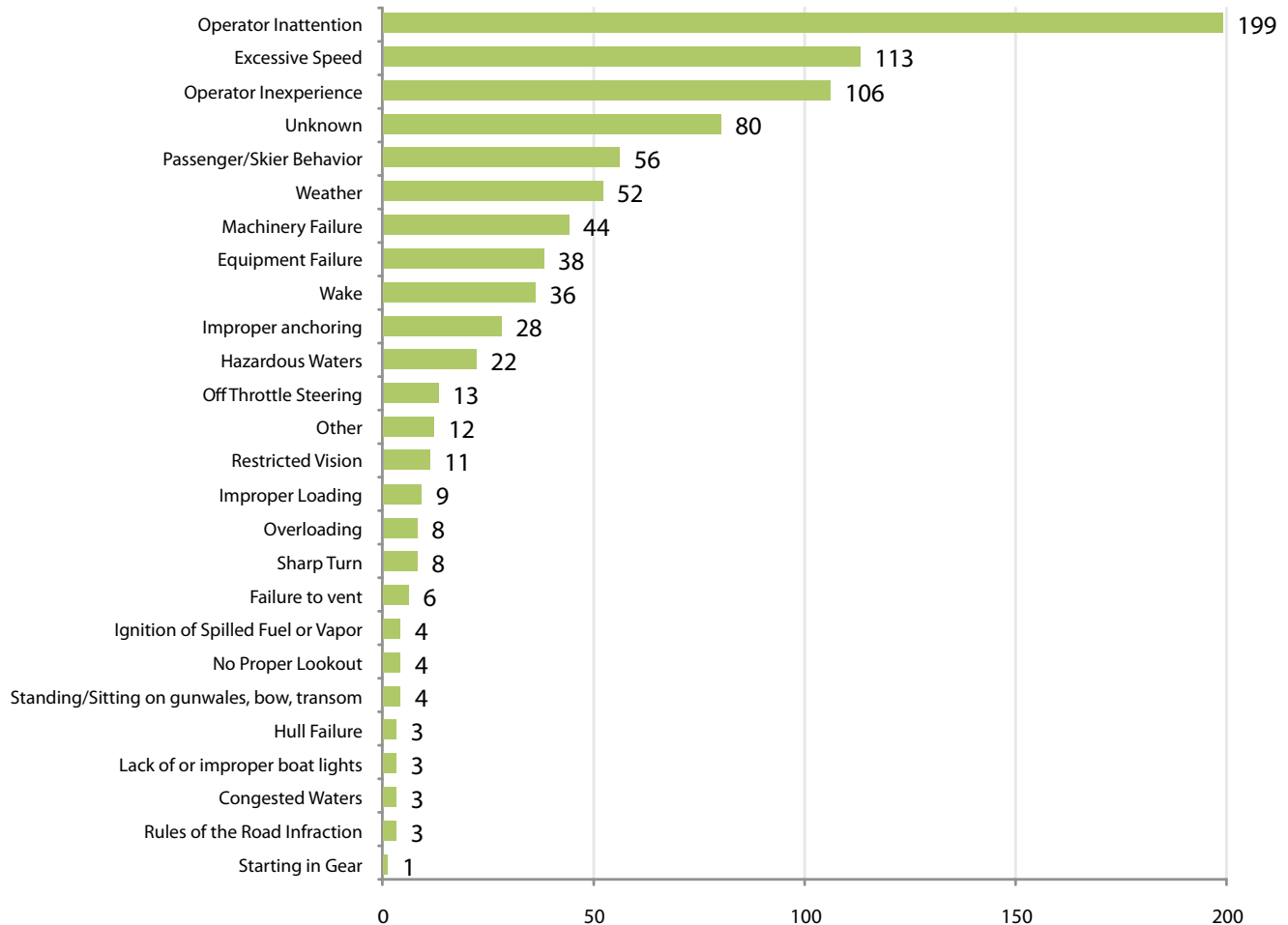
Type of Accident by Vessel Type

Type of Accident	All Vessels	Open Motorboat	Cabin Motorboat	Personal Watercraft	All Sailboats	Houseboat/Pontoon	Canoe/Kayak
Collision with Vessel	33%	28%	48%	61%	48%	52%	0%
Collision with Fixed Object	8%	6%	11%	6%	8%	7%	7%
Grounding	14%	11%	13%	7%	24%	0%	0%
Falls Overboard	6%	4%	1%	10%	4%	3%	33%
Flooding/ Swamping	16%	20%	23%	0%	8%	7%	20%
Sinking	7%	10%	6%	0%	6%	1%	7%
Capsizing	8%	8%	4%	0%	2%	3%	53%
Skier Mishap	10%	22%	0%	1%	0%	0%	0%
Struck by Boat	1%	1%	1%	2%	0%	7%	0%



California

Causes of Accidents (Total Causes 866* Total Accidents 570)



*Many accidents had more than one cause, which is reflected in this chart. The "Other" category includes causes that do not fit into any of the other categories listed above.

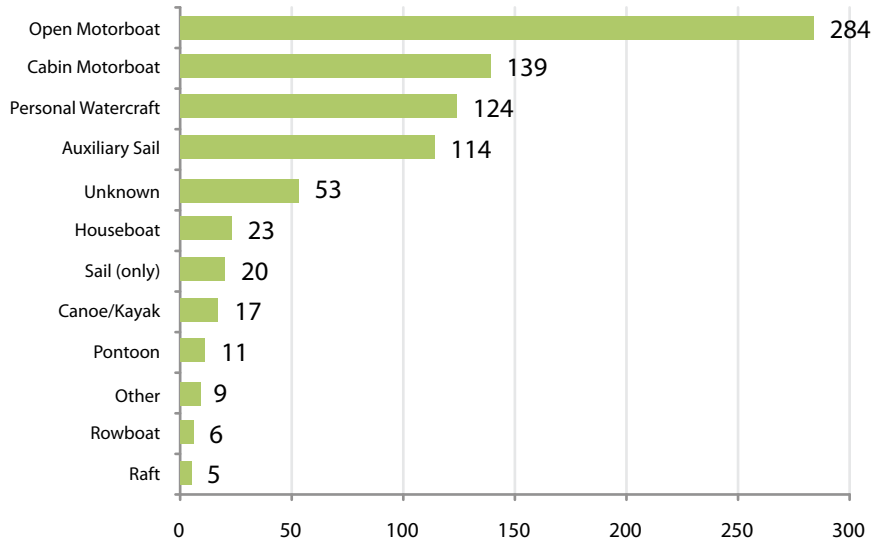
Cause of Accident by Type of Vessel

Cause of Accident	All Vessels	Open Motorboat	Cabin Motorboat	Personal Watercraft	All Sailboats	Houseboat/Pontoon	Canoe/Kayak
Machinery Failure	8%	10%	10%	3%	10%	10%	0%
Operator Inattention	35%	39%	34%	53%	35%	38%	7%
Operator Inexperience	19%	14%	16%	47%	16%	38%	20%
Excessive Speed	20%	21%	13%	56%	7%	21%	0%
Improper Anchoring	5%	0%	5%	0%	17%	0%	0%
Weather	9%	6%	9%	0%	20%	17%	13%
Passenger/ Skier Behavior	10%	20%	1%	0%	0%	7%	0%

Boating Accident Statistics

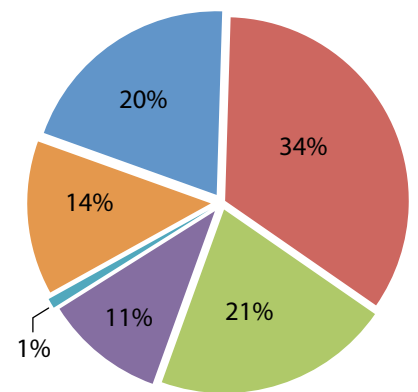
Vessels Involved in All Accidents by Type

(Total Vessels 805)



Vessels Involved in All Accidents by Length

Length of Vessels	Number of Vessels
<16 feet	161
16-25 feet	275
26-39 feet	168
40-65 feet	85
>65 feet	7
Unknown	109
Total Vessels	805



Ownership Status of Vessels Involved in Accidents

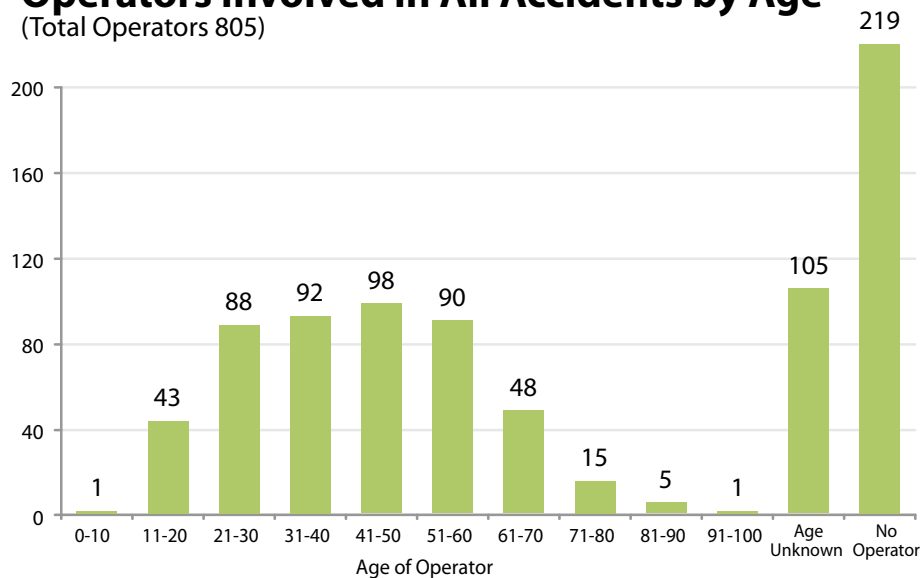
Operated By	All Vessels		Open Motorboats		Personal Watercraft	
	Number of Vessels	Percent of Vessels	Number of Vessels	Percent of Vessels	Number of Vessels	Percent of Vessels
Owner	306	38%	158	56%	22	18%
Borrower	169	21%	59	21%	63	51%
Renter	51	6%	9	3%	29	23%
Unknown	60	7%	8	3%	8	6%
No Operator	219	27%	50	18%	2	2%
Total Vessels	805	100%	284	100%	124	100%



California

Operators Involved in All Accidents by Age

(Total Operators 805)



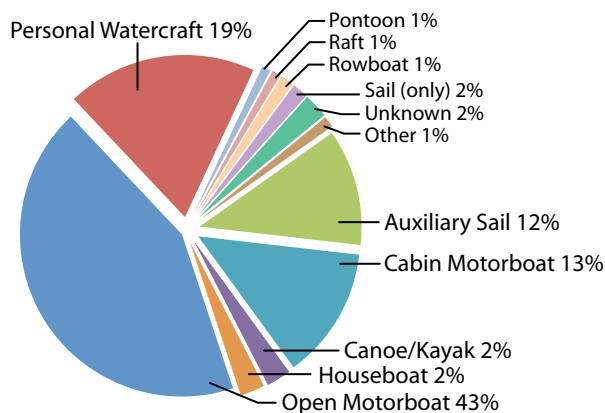
Operator Education

Type of Education	Number of Operators
American Red Cross	10
State Course	27
U.S. Power Squadron	5
USCG Auxiliary	15
Other	2
Informal	171
None	165
Unknown	191
No Operator	219
Total	805

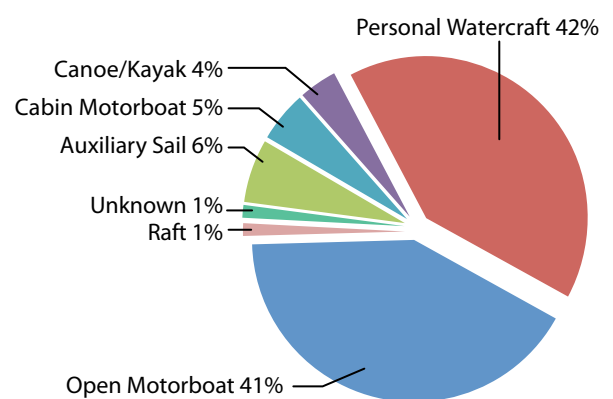
Gender of Operators Involved in Accidents

Gender	Number of Operators
Male	448
Female	79
Gender Unknown	59
No Operator	219
Total	805

Type of Vessels Operated by Men Involved in Accidents

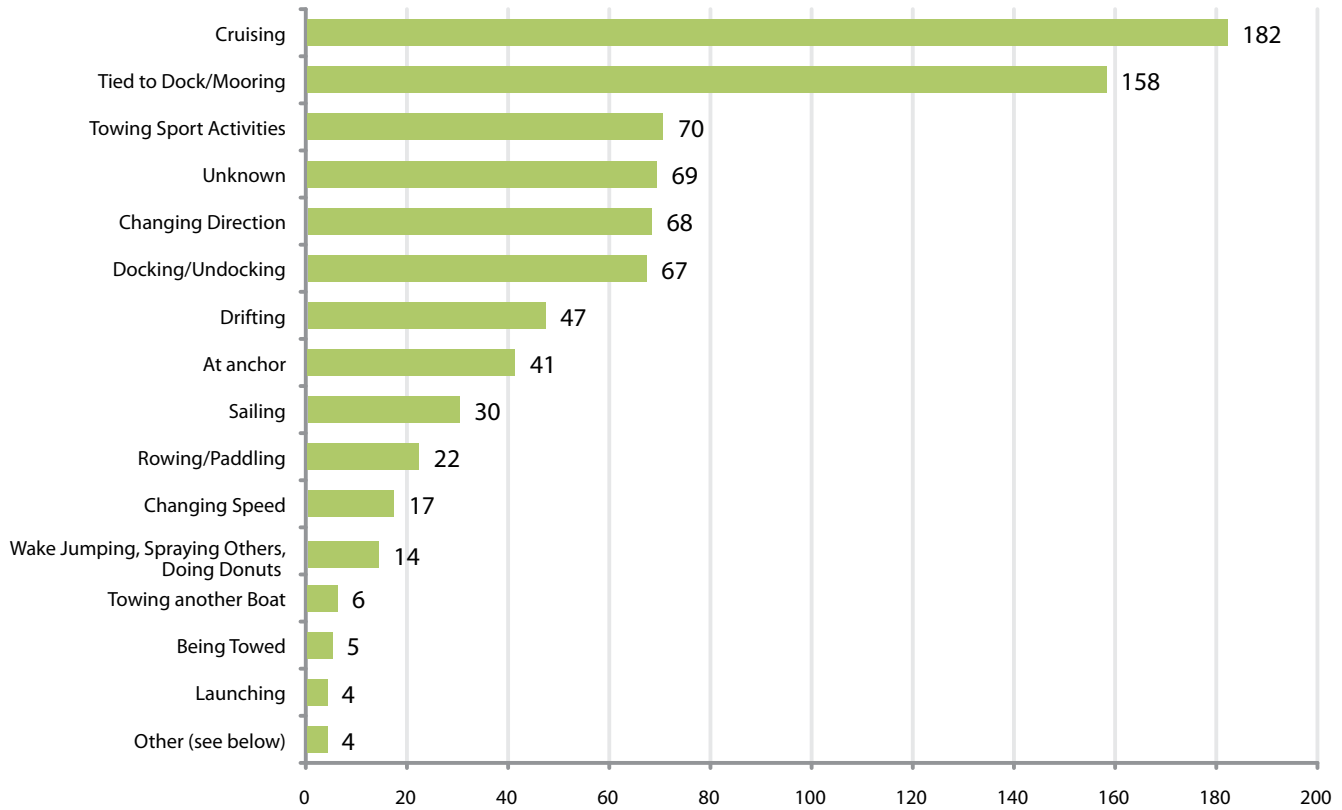


Type of Vessels Operated by Women Involved in Accidents

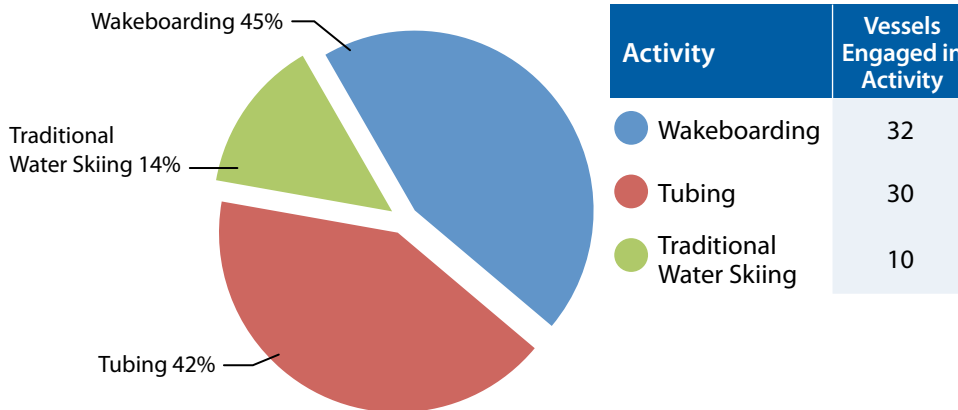


Boating Accident Statistics

Operation at Time of Accident (Total Vessels 805)



Accidents Involving Towing Sports*

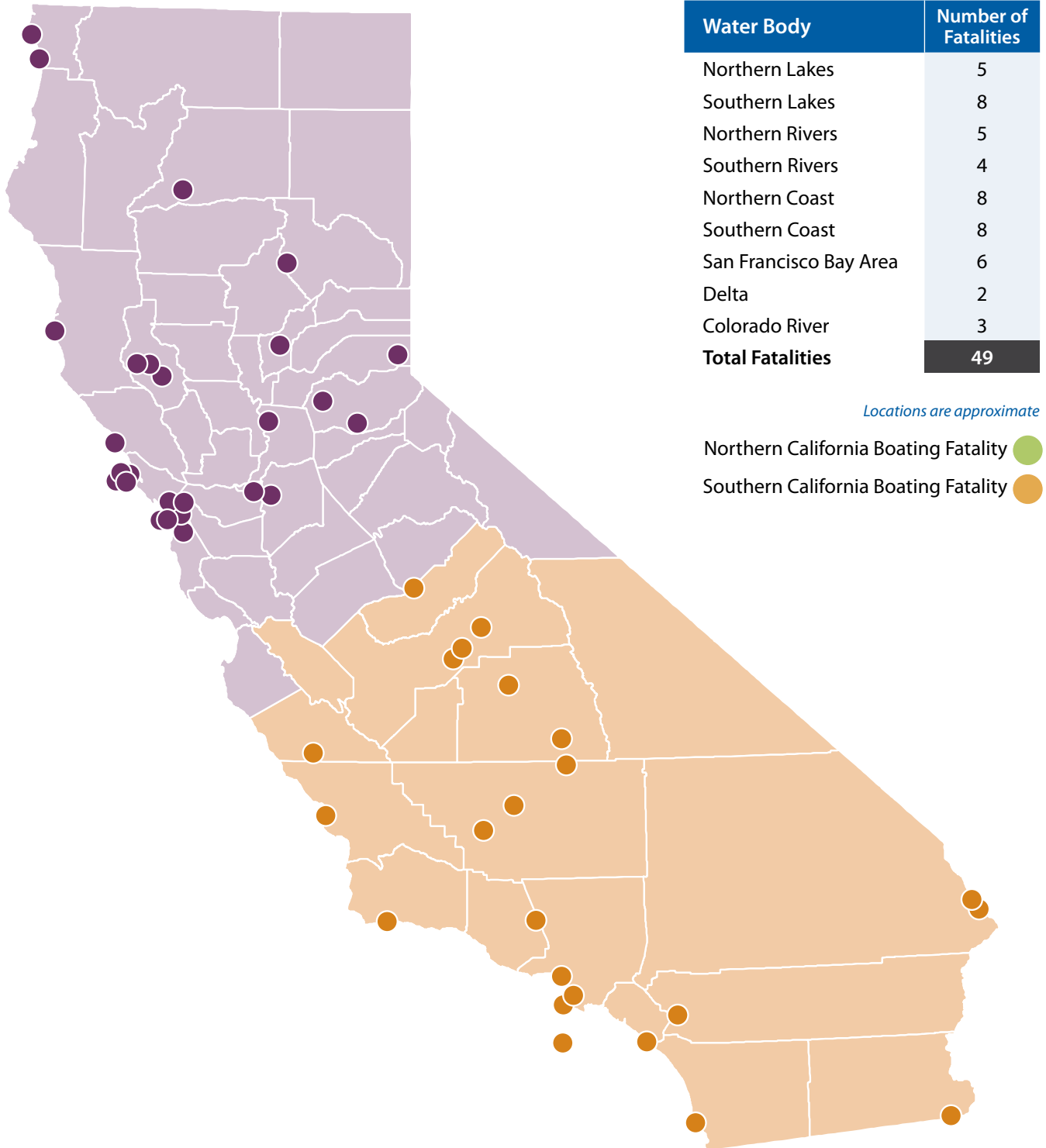


*Towing sports include persons being towed on lines behind vessels on water skis, wakeboards, wake skates, kneeboards, skurf boards, tubes and parasails.

One of the accidents involved two vessels participating in different types of towing sports. Consequently, 72 vessels involved in towing sports were involved in 71 accidents. Accident percentages on the adjacent chart are based on 71 accidents.

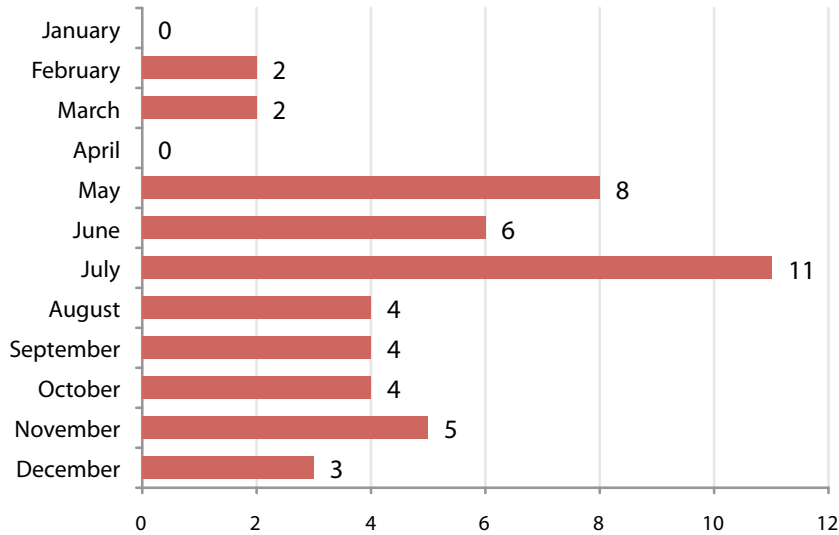


2010 California Recreational Boating Fatalities by Location

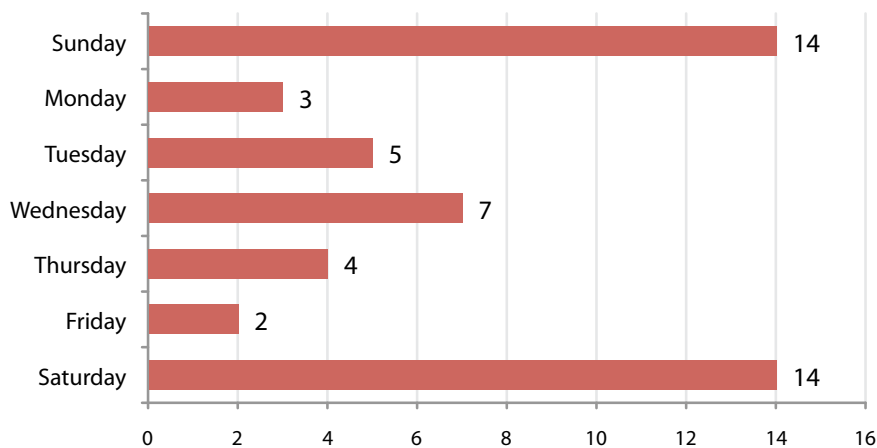


Boating Accident Statistics

Fatalities by Month (Total Fatalities 49)



Fatalities by Day of the Week (Total Fatalities 49)



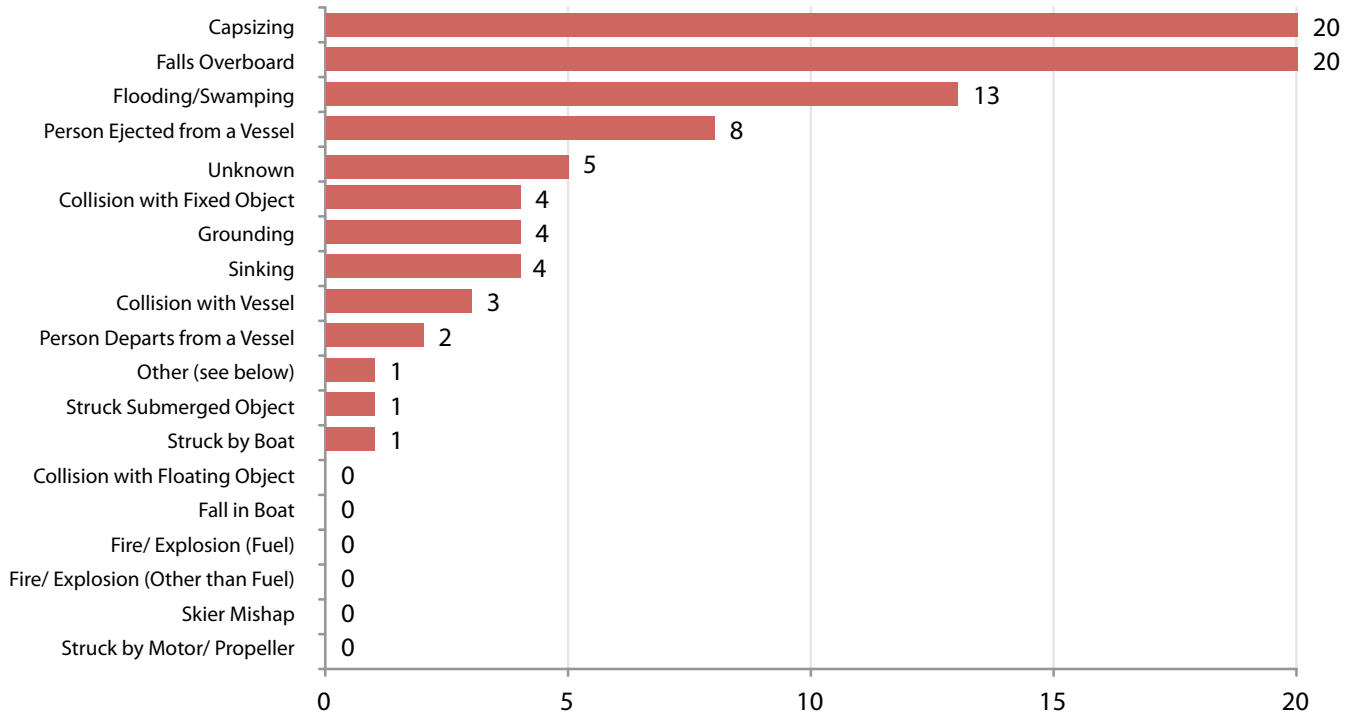
Accidents by Time of Day

Time of Day	Number of Fatalities
12:00-1:59 a.m.	0
2:00-3:59 a.m.	1
4:00-5:59 a.m.	2
6:00-7:59 a.m.	0
8:00-9:59 a.m.	1
10:00-11:59 a.m.	7
12:00-1:59 p.m.	6
2:00-3:59 p.m.	9
4:00-5:59 p.m.	10
6:00-7:59 p.m.	4
8:00-9:59 p.m.	7
10:00-11:59 p.m.	0
Time Unknown	2
Total Fatalities	49



California

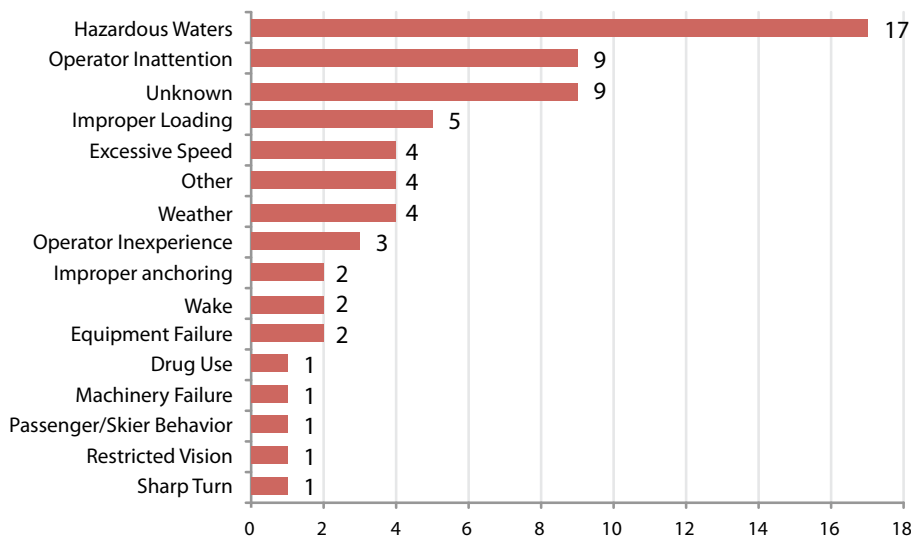
Fatalities by Type of Accident (Total Types 86* Total Fatalities 49)



*Some accidents are represented by more than one accident type, which accounts for the accident types exceeding the number of accidents.

Fatalities by Cause of Accident

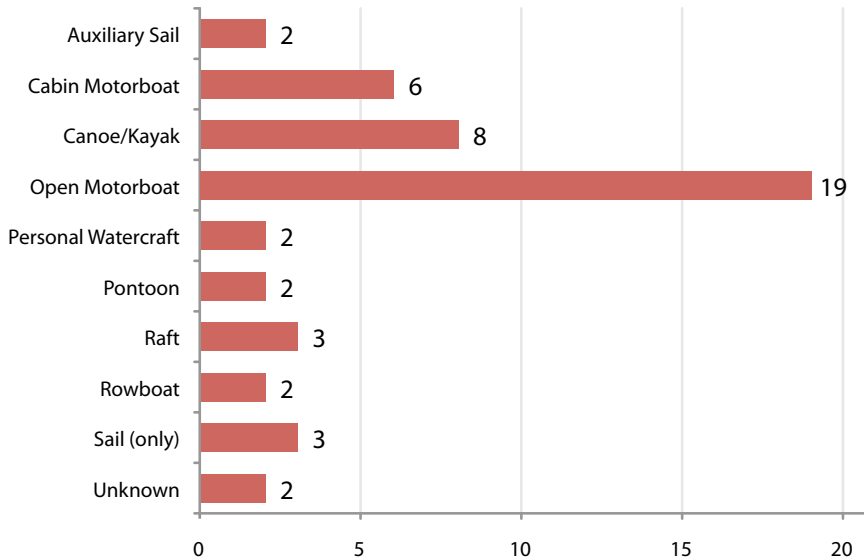
(Total Causes 65* Total Fatalities 49)



*Many accidents had more than one cause, which is reflected in this chart. The "Other" category includes causes that do not fit into any of the other categories listed left.

Boating Accident Statistics

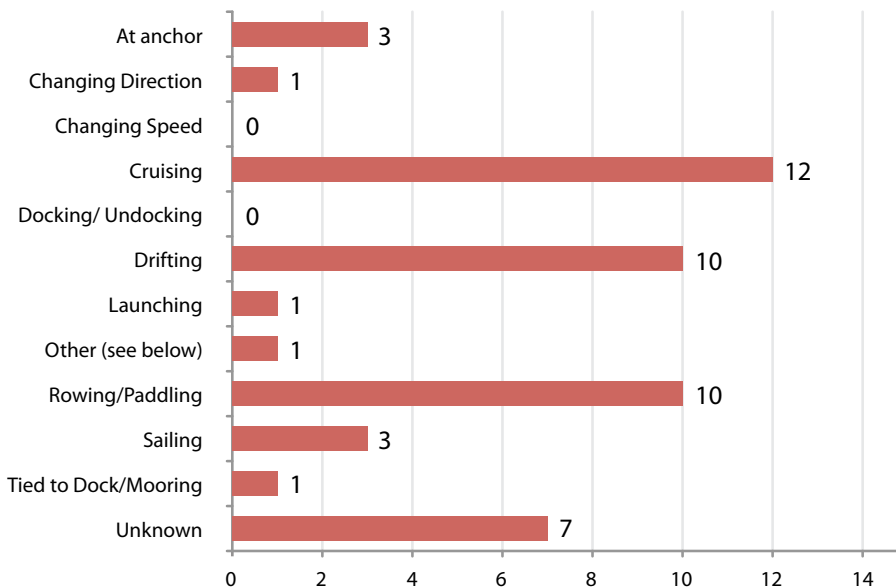
Vessels Involved in Fatal Accidents (Total Vessels 49)



Vessels Involved in Fatal Accidents by Length

Length of Vessels	Number of Vessels
<16 feet	14
16-25 feet	19
26-39 feet	6
40-65 feet	0
> 65 feet	0
Unknown	10
Total Vessels	49

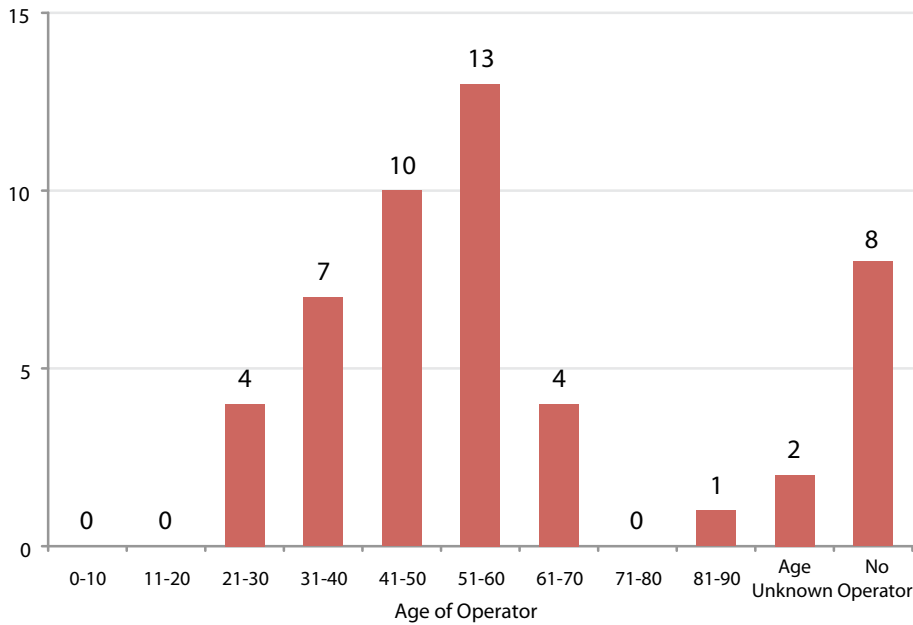
Operation at Time of Fatal Accident (Total Vessels 49)





California

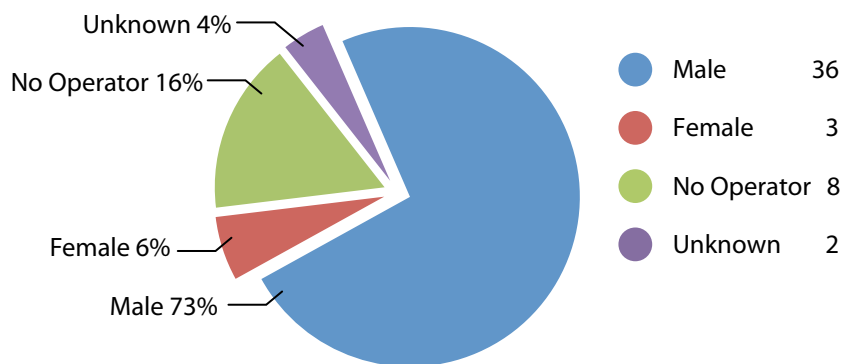
Operators Involved in All Fatal Accidents by Age (Total Operators 41 Total Vessels 49)



Operator Education

Type of Education	Number of Operators
American Red Cross	0
State Course	0
U.S. Power Squadron	0
USCG Auxiliary	1
Other	0
Informal	6
None	6
Unknown	28
No Operator	8
Total Vessels	49

Gender of Operators Involved in Fatal Accidents



Boating Accident Statistics

2006-2010 Life Jacket Use by Cause of Death

Cause of Death	Wearing Life Jacket	Not Wearing Life Jacket	Life Jacket Use Unknown	Total
Drowning	30	130	6	166
Trauma	26	19	2	47
Carbon Monoxide	0	1	1	2
Hypothermia	1	2	0	3
Other (Specify Below)	4	5	1	10
Unknown Cause	2	11	2	15
Total Fatalities	63	168	12	243

2006-2010 Life Jacket Use by Victim Activity

Activity	Wearing Life Jacket	Not Wearing Life Jacket	Life Jacket Use Unknown	Total
General Recreation	33	62	5	100
Fishing	8	76	1	85
Hunting	0	1	0	1
Paddle Sports	14	7	2	23
Towing Sports	6	4	1	11
Sailing/ Windsurfing	1	6	1	8
Other	2	12	1	15
Total Fatalities	64	168	11	243

2006-2010 Life Jacket Use by Victim's Type of Vessel

Type of Vessel	Wearing Life Jacket	Not Wearing Life Jacket	Life Jacket Use Unknown	Total
Open Motorboat/Pontoon	17	96	1	114
Cabin Motorboat	1	21	3	25
Personal Watercraft	21	5	0	26
Canoe/Kayak/Raft	19	17	3	39
Sailboats/Sailboards	4	10	3	17
Other	1	13	2	16
Unknown	0	6	0	6
Total Fatalities	63	168	12	243



California

Location of Fishing Fatalities 2006-2010

(Total Fatalities 85)

